

Save the Bitterroot Conservation Coalition (S.B.C.C.)

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**RECEIVED**

**SEP 24 2007**

**Ravalli County Commissioners**

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Dear Ravalli County Commisioners,

September 21, 2007

Re Bitterroot Valley Air Pollution & Subdivision Approvals

This past summers fire season once again resulted in very serious air pollution problems for all of us and this scenario is unlikely to change in the future, as you well know. The EPA notified us back in February that we have a very serious problem year-round and that by even taking the effects of forest fire smoke out of the equation, the air quality is still deadly and many of your constituents are suffering and some are actually dying, prematurely. If you add forest fire smoke back into the equation, then we have extremely deadly pollution for folks with compromised health that requires immediate action on your part to protect the citizens of this valley. It is clear that the topography of the valley is especially conducive to trapping much of the pollution and it is especially serious during temperature inversions. The pollution comes from a number of sources and short-term mitigation measures are unlikely to result in measureable reductions. A full blown recovery plan that looks into the future is absolutely necessary if we are to avoid a health crisis.

The EPA warning letter gives the Commisioners the right, if not the obligation, to restrict activities that will make the air quality worse, including housing development, that is simply bringing more sources of air pollution into our valley.

I have read with interest the hard work that you are accomplishing to deal with the extreme numbers of planned subdivision and it appears as though current Montana state law is forcing the Commision to approve subdivisions that a majority of you may otherwise deny. It is my contention that federal law (Clean Air Act and National Environmental Policy Act) supercedes state subdivision laws and that the EPA notification can and should be used as a basis for denying subdivision approval until which time an air pollution recovery plan is completed and implemented. Any lawsuit brought forward concerning this issue would have very little problem showing "harm" to the plaintiffs, as every citizen of Ravalli County is in fact being harmed on a daily basis and thresholds of environmental significance have already been breached.

I have researched the health effects data from the EPA and would like to suggest that the Commision do the same. I believe that the data will shock you into pursuing a recovery plan more assertively. In the meantime, we need to be careful about allowing additional air pollution sources into the fabric of our everyday life.

A copy of the February EPA letter is attached for you benefit.

Sincerely,

*CL*

Chris A. Linkenhoker

Cc Bitterrooters for Planning

-----Original Message-----

**From:** Jeffrey, Robert [mailto:rjeffrey@mt.gov]

**Sent:** Wednesday, January 10, 2007 5:22 PM

**To:** Ben Schmidt; Cascade Sanitarians; Cherry Loney; Dan Dennehy; Dan Powers; Eric Englebert; Jan Scher; Jennifer Pinnow; Jim Carlson; Joe Russell; Kathy Moore; Morgan Farrell; Paul Riley; Rick Larson; Ron Anderson; Russ Bosch; Shannon Theriault; Stephanie Nelson; Ted Kylander; Wendee Jacobs; Andy Hunthausen; Barbara Evans; Bill Carey; BSB Commission; Chris Kukulski; City Commission; City Council; City Council; City Council; City Council; County Commission; County Commission; County Commission; Glenda Wiles; Ed Tinsley; Gary Marks; Jean Curtiss; Jeff Krauss; Jim Smith; Mike Murray; Paul Babb; Planning; Ron Alles; Tim Burton; Andy Epple; Ben Rangel; Bob Horne; Candi Beaudry; Charlie Johnson; Chris Saunders; Cloud, Bill; Cynthia Wulfekuhle; Dave Dobbs; David Mumford; David Ohnstad; Debbie Arkell; Duke, Becky; Eric Griffin; Frank Rives; Gregory Robertson; Helm, Cora; Henry Hathaway; James Hansz; Jason Karp; Jean Pentecost; Jeff Harris; Jim Rearden; Joseph Menicucci; John Rundquist; John VanDaveer; John Wilson; Karen Hughes; Kevin McGovern; Mike Kress; Rick Hixson; Ryan Leland; Scott Walker; Sesso, Jon; Steve King; Steyaert, Tom; Straehl, Sandra; Turner, Dick; Vern Heisler; Zanto, Lynn (MDT); Bob Rebarchik; Craig Glazier; Dan Redline; Dave Grace; Dave Krueger; Dusty Pence; McLeod, Scott; Myron Hotinger; Paul Wagner; Steve Hayes; Thomas Dzomba

**Cc:** Vidrine, Don; Habeck, Bob; Coefield, John; Erp, Elton

**Subject:** Potential Montana PM2.5 Non-Attainment Areas

**Importance:** High

Dear Interested Party:

The U.S. Environmental Protection Agency (EPA) recently revised the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM). As you may know, the NAAQS are standards set to protect public health and welfare. The federal Clean Air Act requires EPA to review the latest scientific information and revise the NAAQS, as needed, for all criteria air pollutants every five years. The final rules for the revised PM NAAQS were published in the Federal Register at 71 FR 61144 on 17 October 2006, and became effective on 18 December 2006.

The Montana Department of Environmental Quality (DEQ) has reviewed the revised PM NAAQS and the ambient air quality data that's been collected around the state for the last several years. DEQ has identified four Montana communities with a high probability of failing to meet new PM NAAQS. Based on air monitoring data collected from 2003 through 2005, DEQ currently projects violations of the 24-hour PM2.5 NAAQS in the Missoula, Libby, Hamilton and Butte areas. The data also indicates that the Helena, Flathead and Gallatin Valleys are dangerously close to violating the 24-hour PM2.5 NAAQS. These projections will be updated as new monitoring data becomes available. The Libby area is currently designated a non-attainment area (NAA) for exceeding the annual standard based on the former 1997 PM NAAQS. I've attached a document summarizing some of the issues with the new PM NAAQS and PM data for several Montana communities.

In late 2008, based on ambient air monitoring data collected in 2005, 2006, and 2007, DEQ must notify EPA as to whether or not local Montana communities are complying with the PM NAAQS. Federally enforceable control plans must be submitted for EPA's approval for those Montana communities found in violation of any NAAQS. In a proactive attempt to prevent the designation of new NAAs, DEQ would like to work with local air pollution control agencies, the regulated community, and other interested parties to identify and control sources of particle air pollution. DEQ representatives are willing to meet with interested parties in their communities at mutually agreed upon dates and times. In addition to the PM NAAQS discussion, other air quality topics of interest could be discussed.

If interested, please contact myself or Bob Habeck ([bhabeck@mt.gov](mailto:bhabeck@mt.gov) or 444-7305) to schedule a meeting.

Thank you for your efforts in protecting Montana's clean air resources.

Robert K. Jeffrey  
Air Quality Specialist  
Air Resources Management Bureau  
MT Dept. of Environmental Quality  
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<<PM25\_NAAQS\_MT\_Review\_Rev.doc>>

## **Potential Montana PM<sub>2.5</sub> Non-Attainment Areas**

*December 2006*

### **I. Introduction**

The U.S. Environmental Protection Agency (EPA) recently revised the national ambient air quality standards (NAAQS) for particulate matter (PM). NAAQS are intended to protect public health and are established for six criteria air pollutants. The revisions affect standards for fine PM less than 2.5 microns (PM<sub>2.5</sub>) and standards for particles less than 10 microns (PM<sub>10</sub>). The revisions also affect the ambient air monitoring requirements for PM.

### **II. PM NAAQS & Related Rules Published in the Federal Register (FR)**

11/1/05: PM<sub>2.5</sub> Implementation rule proposed in 70 FR 65984  
1/17/06: PM NAAQS Revisions proposed in 71 FR 2620  
1/17/06: PM Monitoring Revisions proposed in 71 FR 2710  
2/9/06: Transition to New or Revised PM NAAQS; advanced notice of proposed rulemaking in 71 FR 6718  
3/10/06: Treatment of Data Influenced by Exceptional Events; proposed in 71 FR 12592  
10/17/06: PM NAAQS final rule published in 71 FR 61144

### **III. PM<sub>2.5</sub> NAAQS Compliance Designation Timeline**

12/18/06: Effective date of the 'final' PM NAAQS rule  
11/27/08: Based on air monitoring data collected in 2005-2007, States' submit recommendations to EPA as to whether or not local communities are complying with the PM NAAQS.  
11/27/09: EPA makes final PM compliance designations after reviewing updated monitoring data from 2006-2008  
4/27/10: Effective date for EPA's PM compliance designations  
4/27/13: Deadline for States to submit PM State Implementation Plans (SIP) to 'clean up' the air in those communities designated as 'non-attainment'

#### IV. Related PM NAAQS Issues & Studies

- EPA withdrew its proposal for a coarse PM<sub>10-2.5</sub> standard
- EPA retained the 24-hr PM<sub>10</sub> standard to protect against the health effects associated with short-term exposure to coarse particles
- EPA revoked the annual PM<sub>10</sub> standard
- A Chemical Mass Balance (CMB) study to identify PM<sub>2.5</sub> air pollution sources was conducted in Libby during the winter of 2003-2004 and the source apportionment report was submitted on 11 January 2005
- CMB studies are being conducted in Missoula and Hamilton during the winter of 2006-2007 with the report due in August 2007.
- CMB studies are planned for Butte, Helena, & Whitefish during the winter of 2007-2008 with the report due in the summer of 2008.

#### V. Montana PM Monitoring Data Review & Compliance Projections

Table 1 reviews the current and former PM NAAQS. Tables 2 and 3 summarize community ambient PM<sub>2.5</sub> data for short-term and annual time periods, respectively. Table 4 projects potential PM<sub>2.5</sub> non-attainment areas in Montana for short and long-term PM NAAQS, and lists the current PM<sub>10</sub> non-attainment areas (NAA).

**Table 1. Current & Former PM<sub>2.5</sub> & PM<sub>10</sub> NAAQS (units are  $\mu\text{g}/\text{m}^3$ )**

FORM	PM <sub>10</sub> (1987)	PM <sub>10</sub> (2006)	PM <sub>2.5</sub> (1997)	PM <sub>2.5</sub> (2006)
24-Hour	150 <sup>a</sup>	150 <sup>a</sup>	65 <sup>c</sup>	35 <sup>c</sup>
Annual	50 <sup>b</sup>	revoked	15 <sup>d</sup>	15 <sup>d</sup>

<sup>a</sup> Expected 24-hr average exceedance from statistical calculations based on 3 years of data

<sup>b</sup> Annual mean from statistical calculations based on 3 years of data

<sup>c</sup> 3-year average of the 98<sup>th</sup> percentile values

<sup>d</sup> 3-year average of the spatially averaged means

**Table 2. PM2.5 Daily Data & Potential Non-Attainment Areas**  
(24-hr values are 98<sup>th</sup> percentile; units are µg/m<sup>3</sup>)

Location	1999 <sup>1</sup>	2000 <sup>1</sup>	2001 <sup>1</sup>	Avg <sup>2</sup>	2002 <sup>3</sup>	2003 <sup>3</sup>	2004 <sup>3</sup>	2005 <sup>3</sup>	Avg <sup>2</sup>	2006 <sup>4</sup>
Belgrade	nd	51	33	nd	25	30	25	36	30	30.0
Billings	17	28	23	23	14	22	19	21	21	18.3
Bonner	nd	nd	nd	nd	26	42	43	nd	nd	nd
Bozeman										34.7
Butte	35	63	22	40	27	44	30	36	37	36.8
Great Falls	nd	28	17	nd	18	51	12	18	27	15.9
Hamilton	nd	109	34	nd	24	34	45	37	39	22.5
Helena	20	41	38	33	18	32	33	38	34	26.5
Kalispell	20	27	26	24	24	51	25	18	31	22.8
Libby	52	44	45	47	47	43	38	51	44	40.5
Lincoln <sup>5</sup>	nd	nd	29	nd	45	50	14	18	27	nd
Missoula	29	53	44	42	25	49	47	43	46	31.5
Seeley Lake	nd	nd	nd	nd	nd	nd	23	25	nd	32.1
Thomp. Falls	nd	nd	16	nd	18	33	18	15	22	21.5
Whitefish	27	29	37	31	28	57	23	22	34	26.2
W. Yellowstone	nd	nd	nd	nd	nd	5	18	8	10	12.7

- <sup>1</sup> Includes all valid data
  - <sup>2</sup> Averages based on the 3-yr periods of 1999-2001 and 2003-05
  - <sup>3</sup> Excludes data flagged as 'exceptional events', e.g. wildfire smoke
  - <sup>4</sup> Includes only data from the first, second & third quarters, and includes data potentially affected by wildfire smoke
  - <sup>5</sup> Different monitoring sites between 2002 & 2003
- nd = no data  
Red = currently demonstrating noncompliance  
Orange = potential for noncompliance

**Table 3. PM2.5 Annual Means & Potential Non-Attainment Areas**  
(Annual means not calculated as required by 40 CFR Part 50 Appendix N; units are  $\mu\text{g}/\text{m}^3$ )

Location	1999 <sup>1</sup>	2000 <sup>1</sup>	2001 <sup>1</sup>	Avg. <sup>2</sup>	2002 <sup>3</sup>	2003 <sup>3</sup>	2004 <sup>3</sup>	2005 <sup>3</sup>	Avg. <sup>2</sup>	2006 <sup>4</sup>
Belgrade	nd	11	9	nd	7	9	7	11	9	10.8
Billings	8	9	8	8	7	8	8	7	8	9.2
Bonner	nd	nd	nd	nd	10	9	8	nd	nd	--
Bozeman										8.5
Butte	7	14	7	9	7	10	9	10	10	9.9
Great Falls	nd	8	5	nd	5	7	5	6	6	6.0
Hamilton	nd	16	9	nd	7	8	9	8	8	8.1
Helena	6	11	9	9	7	8	8	9	8	7.3
Kalispell	7	9	8	9	8	10	9	8	9	7.4
Libby <sup>5</sup>	16	17	16	16	16	16	14	16	15	13.6
Lincoln <sup>6</sup>	nd	nd	9	nd	11	7	5	4	5	--
Missoula	10	15	10	12	8	11	11	11	11	8.7
Seeley Lake	nd	nd	nd	nd	nd	nd	12	11	nd	9.2
Thomp. Falls	nd	nd	6	nd	6	7	6	6	6	6.4
Whitefish	11	12	15	13	9	13	10	10	11	8.8
W. Yellowstone	nd	nd	nd	nd	nd	2	5	4	4	5.2

- <sup>1</sup> Includes all valid data  
<sup>2</sup> Average of annual means based on the 3-yr periods of 1999-2001 and 2003-05  
<sup>3</sup> Excludes data flagged as 'exceptional events', e.g. wildfire smoke  
<sup>4</sup> Includes only data from the first, second & third quarters, and includes data potentially affected by wildfire smoke  
<sup>5</sup> Libby is currently designated as non-attainment for the 1997 PM2.5 annual standard  
<sup>6</sup> Different monitoring sites between 2002 & 2003  
nd = no data  
Red = currently demonstrating noncompliance  
Orange = potential for noncompliance

**Table 4. Current PM10 & Potential PM2.5 Non-Attainment Areas**  
(PM concentrations in  $\mu\text{g}/\text{m}^3$ )

Current PM10 NAA		Potential PM2.5 NAA based on 2003-05 Data			
Location	Historic Max. Violation Value <sup>1</sup> (24-hr avg)	Location	24-hour avg. 98 <sup>th</sup> Percentile	Location	Annual Mean 3-yr average
Whitefish	333	Missoula	46	Libby <sup>2</sup>	15
Butte	302	Libby	44	Missoula	11
Thompson Falls	261	Hamilton	39	Whitefish	11
Kalispell	260	Butte	37		
Libby	256	Helena	34		
Missoula	239	Whitefish	34		
Columbia Falls	186	Kalispell	31		
		Belgrade	30		

<sup>1</sup> The highest monitored value from the time period with violations of the 24-hour standard.

<sup>2</sup> Libby is currently designated as non-attainment under the 1997 PM2.5 annual standard.

Red = currently demonstrating noncompliance

Orange = potential for noncompliance